

I claim:

1. A multi-point communications system, comprising a plurality of communication units coupled together in a series point-to-point configuration, each of said communications units comprising:

5 a first E1/T1 protocol framer having a communications port for point-to-point communication with a first remote communications unit and a local communications port;

a second E1/T1 protocol framer having a communications port for point-to-point data communications with a second remote communications unit and a local communications port; and

control means coupled to the first and second framers for controlling the passage of
10 communications data generated by the communications unit to said first and second framers for transmission to the coupled remote communications units and for controlling the passage of communications data received by one of said first and second framers from a remote communication unit to the other of said first and second framers for further transmission to another remote communications unit.

15 2. The communications system of claim 1 wherein said control means is coupled to the local communications ports of the first and second framers.

3. The communications system of claim 2 wherein said control means comprise means for placing preamble data on a first group of channels and communications data controlled by said preamble data on a second group of channels.

5 4. The communications system of claim 3 further comprising means in each of the communications units for dynamically assigning one of the framers of one of the communications units of the communications system free run status to provide timing signals for the communications system.

10 5. The communications system of claim 4 wherein said dynamic assignment means includes means for identifying terminal communications of the communications system and assigning free run status to to one of the framers of one of the terminal communications units.

6. The communications system of claim 5 wherein said dynamic assignment means further includes means for assigning parent status to the communications unit having the free run status framer.

15 7. The communications system of claim 6 wherein said communications unit having parent status controls the sequence and timing of data communications along the communications system.

8. The communications system of claim 4 wherein said control means further comprise a pair of multiplexers each coupled to the local communications ports of the first and second framers and means for selectively enabling one of said multiplexers to direct the direction of communications between communications units.

5 9. The communications system of claim 8 wherein said control means further comprises a pair of demultiplexers each coupled to the local communications ports of the first and second framers.

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